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## 4-H Programming for Urban Youth in Des Moines, Iowa

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4-H Programming for Urban Youth in Des Moines, Iowa

Megan Freel

Iowa State University

## **Introduction**

4-H is a community of 6 million young people across the world who are learning how to live healthily, be leaders, become engaged in their communities, and use science and technology to make good decisions for their future and their communities' future (4-H Youth Development, 2019). Iowa 4-H is working to ensure the campaign of the National 4-H Council, 4-H Grows: A Promise to America's Kids, is successful. The campaign states in 2025, 4-H will reflect the population demographics, vulnerable populations, diverse needs and social conditions of the country. This vision has the elements of inclusion, caring adults, serving at minimum one in five youth, and volunteers and staff that reflect the diversity of the population (4-H, 2019). Iowa 4-H's vision states they are preparing Iowa's youth to be successful, contributing members of society and the mission states 4-H empowers youth to reach their full potential through youth-adult partnerships and research-based experiences (4-H Youth Development, 2019).

Within the school districts of Polk County, Iowa there were 80,651 youth enrolled in kindergarten through 12<sup>th</sup> grade in the 2017-2018 school year; of those youth, 2,021 were reached with at least six hours of 4-H programming (4-H and Family Life Educator, personal communication, 2019). With only .02% of youth in Polk County engaged in 4-H programming, 4-H staff have some work to do to recruit and retain youth as 4-H has seen less youth participate at the Intermediate and Senior levels of the program (7<sup>th</sup> grade through 12<sup>th</sup> grade) overall. When asked to identify roadblocks to youth participation in 4-H, staff members identified some key points. A large roadblock to urban youth participation in 4-H is the connotation that 4-H is strictly for farm kids with no place for urban youth to participate. While 4-H has been rooted in tradition, there have been strides to break away from the agriculture roots and find a footing within rural, suburban, and urban settings. Additional roadblocks include financial,

transportation, lack of representation, and relevancy. With these roadblocks identified it is important to work to overcome the internal roadblocks, as well as removing the ones the youth experience.

Through this creative component I will develop 12-18 hours of relevant curriculum which can be used in large four to five hour lessons or broken up into smaller one or two hour lessons for Intermediate and Senior aged youth in the Des Moines metro area. I plan to look for ways to reduce the concern of transportation and the locations these programs are held to ensure they are not a barrier to participation. I will also find ways to reduce fees involved with participation in this program in order to ensure any youth who wants to participate is able to do so without a financial barrier. Lastly, I will ensure this is truly a youth-centered program for Intermediate and Senior aged youth focusing on belonging, mastery, and ownership for the youth participants to feel when they finish with the 12-18 hours of curriculum.

### **Background**

4-H has been around for more than 100 years and has become one of the largest youth serving organizations in the United States (4-H, 2019). Originally 4-H clubs focused on agriculture for males and home raising for females. As the population of the United States grew, the membership of 4-H clubs also began to evolve; while still keeping the roots of agriculture and home economics projects there are now many more project areas in which youth participate. Youth can participate in project areas related to the four program priority areas identified by 4-H; STEM, Healthy Living, Communication and the Arts, and Leadership and Civic Engagement. These priority areas are broken down into smaller areas such as robotics, welding, home grounds improvement, and sustainability. Traditional club formatting has also evolved over the years

from business meetings once a month to include before and after school-type groups, day camps, short term special interest groups, and many others.

### **Roadblocks to Participation**

Urban youth participation in 4-H has been vital to the evolution of program implementation over the years. New and diverse audiences has been a key topic among 4-H program leaders, state and local staff, and volunteers over the recent years. Iowa 4-H has created 4-H Maize, Ujima, and Connect retreats to help connect urban youth with a 4-H camp experience at no cost to the youth (4-H Connect Retreat, 2019). Through this experience youth across Iowa come together at Clover Woods camp in Madrid for a weekend of learning, leadership, and fun. One problem 4-H staff have encountered is how to keep these urban youth engaged for more than just that weekend. Solutions they are looking for include new programs that are relevant and engaging for the youth to participate in throughout the rest of the 4-H program year, which are also in a centralized location and of little to no cost to the youth.

There have been many roadblocks identified by Iowa 4-H staff members as well as by other researchers as to why youth are having difficulties, or choosing not to participate in the 4-H youth development program. Some identified roadblocks by Chilek (2012) include the following:

- Topics that have been mainstays for 4-H are no longer interesting to teens
- Older teens are interested in career education, etc.
- Youth generally leave 4-H due to dissatisfaction with club activities
- Boring meetings
- Not getting enough project help
- Parents feel like leaders aren't doing enough

- Lack of understanding of 4-H program goals, activities, events and time commitment
- Never felt welcome
- Project groups did not meet often enough

Youth who encounter any of the mentioned roadblocks may not be able to participate in 4-H, even if they truly want to do so. Without ways to help youth get over these roadblocks 4-H staff members are missing a large opportunity to reach the youth in their communities who could benefit from the 4-H youth development program.

As 4-H programs happen in different locations, transportation to and from 4-H programs can greatly impact a youth's ability to participate. Youth from lower income families may have more competing work responsibilities after school, or they may experience transportation barriers (Bouffard, Wimer, Caronongan, Little, Dearing, & Simpkins, 2006). One study found that in most areas there was limited, if any, public transportation available, and many families lacked either the time or the vehicle needed to transport their children to activities (Hobbs, 1999). In a number of cases the lack of follow-through by families was overcome by having a volunteer act as a support. The volunteer provided transportation to and from the activity and/or called to remind the youth to attend (Hobbs, 1999).

Financial burden is not a new topic when it comes to youth participation in various programs. Before and after school activities, sports, clubs, and other programs tend to have different fees associated with participation. There are many fees that are associated with participation in Iowa 4-H which may reduce youth participation. For example, to register for 4-H in Polk County, Iowa, families must pay \$40 per youth. There is no family cap, so if a family has six youth they are paying \$240 just to register (Join 4-H, 2019). In the same study aforementioned, many families could not afford program fees or the cost of special equipment

(Hobbs, 1999). Through the Iowa 4-H Foundation youth are able to apply for financial aid to cover up to \$30 of the \$40 (Funding for 4-H'ers, 2019). Scholarships through the Iowa 4-H Foundation are vital to youth participation, as Hobbs (1999) states "If scholarships were not available, youth could not participate" (p. 37).

A common assumption about 4-H participants is that they are all farmers or raise livestock, which can cause urban youth to feel like they would not belong within the Iowa 4-H program. They (youth) desire belonging and connectedness (Anderson-Butcher, 2005). Mastery is another strong reason youth stay or leave a program; if they are not given the opportunity to master their tasks they can lose interest with the topic at hand. It is this underlying need to develop or demonstrate cognitive, social, and/or physical competence that drives youth toward the successful mastery of certain tasks within youth development programs (Anderson-Butcher, 2005).

Almost 50% of first year 4-H'ers do not re-enroll for a second year (Chilek, 2012).

Chilek goes on to identify three reasons those 50% do not re-enroll:

1. The level at which youth participate plays into if they re-enroll in 4-H or not.
2. Parental participation can lead to youth staying or youth going depending on the level of support they receive.
3. Lack of support from county employees can lead to youth not returning to 4-H

Harder, Lamm, Lamm, Rose III, and Rask (2005) found that "there is a steady decline in the member population that begins at age 12 and continues on through age 18. This decline supports the perceptions by 4-H agents that senior members are difficult to retain in the program" (p. 21). Youth organizations have activities and experiences designed for children and other experiences designed for adolescents. However, teen dropout continues to be a fact of life for 4-H, Boy and

Girl Scouts, and similar programs (Heinsohn, 1995). There are many factors as to why older youth choose to participate in the 4-H program, but these factors need to be thoroughly examined to help increase teen retention and recruitment (Chilek, 2012).

### **Youth in Urban Areas**

Iowa 4-H has created some programs geared specifically for intermediate and senior level youth, and some specifically for youth who live in urban areas. 4-H Connect is a weekend event in March which is geared towards youth who are immigrants and refugees who live in urban areas of Iowa. At the senior level youth are able to apply for National 4-H Congress, National 4-H Conference, and State 4-H Council; these opportunities help engage youth from all areas of Iowa and give them a chance to represent Iowa at the national level, (Iowa 4-H, 2019). Within Iowa 4-H there exists two college access conferences; RISE in central Iowa and GRiT in northern Iowa. These conferences target youth in middle and high school from urban areas and brings them to a college campus for a day to learn about their college opportunities and to connect with 4-H on the local level.

### **Positive Youth Development**

Positive Youth Development is a term uttered within youth programs, but not everyone can speak to what it means to foster Positive Youth Development within their youth program. Iowa 4-H fosters Positive Youth Development by empowering youth to reach their full potential through youth-adult partnerships and research-based experiences (4-H Youth Development, 2019). Positive youth development views young people as vital resources with assets and potentials to be developed (4-H Youth Development, 2019). The field of positive youth



development focuses on each and every child's unique talents, strengths, interests, and future potential (Damon, 2004).

The way the world views youth contributions has evolved over the years to ensure programs directed towards youth are youth centered. Based on the critical social issues that existed at the end of the 19th and early 20th centuries, a number of organizations designed to organize young people's out-of-school time were developed. Different organizations were created to serve individuals from different social classes and different locations (e.g., urban, small town, farm communities; Witt & Caldwell, 2018).

From the 20<sup>th</sup> century on these organizations continued to develop best practices and procedures to empower youth to reach their full potential. The positive youth development perspective emphasizes the manifest potentialities rather than the supposed incapacities of young people-including young people from the most disadvantaged backgrounds and those with the most troubled histories (Damon, 2004). The field of Youth Development looks at five Cs within the program as strong indicators of success. Wit and Caldwell (2018) states "At the core of this [Development Systems] model is a set of five Cs achieved by youth that result when individual and contextual elements interact positively. These five Cs are competence, confidence, connection, character, and caring," (p. 10). In addition to the five Cs, there are also 40 developmental assets which contribute to helping youth thrive into adulthood. These 40 developmental assets are split into 20 internal and 20 external which are based on factors that inhibit high-risk behaviors youth may be faced with (Wit & Caldwell, 2018).

4-H has adopted the positive youth development model in designing programs and training volunteers. 4-H has also been involved in an extensive research program to better understand the impacts associated with participation in 4-H and other youth programs (4-H,

2019; Witt & Caldwell, 2018). The positive youth development approach aims at understanding, educating, and engaging children in productive activities rather than at correcting, curing, or treating them for maladaptive tendencies or so-called disabilities (Damon, 2004).

## **Methods**

Research articles gathered regarding 4-H youth programming and youth programming were compiled through the Journal of Extension, Journal of Youth Development, The Prevention Institute, and Sage Journals. Information on Iowa 4-H was gathered from the Iowa State University Extension and Outreach website. The National 4-H website provided information on the general 4-H youth development program. The individual lessons were developed using curriculum from the 4-H Mall. In order to understand current roadblocks experienced by youth in Iowa, as well as current interests of youth and families informal interviews were conducted with the Interim Iowa 4-H Program Leader, the Professional Development Specialist, a Region 13 Youth Program Specialist, and the Stakeholder and Partnership Development Program Coordinator.

## **Results**

Three lessons were developed, each with its own distinct topic and goals. The first lesson (Appendix A) is a STEM lesson wherein students will create their own 360 degree video to showcase their mastery of video production and virtual reality setup. The second lesson is a cooking lesson (Appendix B) wherein students will cook a meal from scratch. The third lesson (Appendix C) incorporates the second with a meal and fosters the development of communication and interview skills for youth. Each of these lessons will be discussed in turn.

### **STEM Lesson**

Science, Technology, Engineering, and Mathematics programming is a topic schools and groups request the most for supplemental education. Afterschool programs are increasingly recognized as venues for effectively engaging children and youth in science, technology, engineering, and mathematics (STEM; Krishnamurthi, Bevan, Rinehart, & Coulon, 2013). The Iowa State University Extension and Outreach 4-H Youth Development Forward Learning Experience (FLEx) Coordinator recently purchased and distributed Virtual Reality equipment and a 360 degree camera to Iowa 4-H county staff across the state. Within Polk County there existed a need for additional curriculum geared toward older youth that teaches them how to create their own videos for a virtual reality experience. In order to utilize the equipment and help supplement STEM education within Des Moines, the STEM lesson plan was created.

Over the course of three sessions totaling six hours, youth will learn the basics of Virtual Reality and how to create their own 360 degree video (Appendix A). With the help of a staff member, youth will determine a location and topic for a 360 degree video to film. Once filming is complete youth will learn how to edit their videos for a showcase involving their friends and families. Throughout these six hours youth will also participate in team building ice breakers and brain breaks to foster belonging.

### **Cooking Lesson**

The Stakeholder and Partnership Development Coordinator for Iowa State University Extension and Outreach stated refugee and immigrant youth and their families want to learn how to cook American style food like spaghetti and pizza (Partnership and Stakeholder Development Specialist, personal communication, January 2019). While curriculum on cooking exists from the 4-H Mall, a national website 4-H staff utilize to purchase curriculum and supplies for research based program, there is a lack of lessons for older youth. In taking the curriculum already

available and adapting it to be used by older youth, the lessons can be used to teach the youth, who in turn can take what they learn home to teach their families. This enables the youth to show their mastery of cooking and help their families learn new skills.

The cooking lesson (Appendix B) is comprised of five hours of material in which youth will learn basic cooking techniques and how to prepare a meal from scratch. Before cooking youth will learn how to keep themselves and others safe through food safety and how to handle knives properly. Working together youth will prepare a meal from a recipe with guidance from adult volunteers. Once finished cooking youth will share their meal together while having conversations with each other.

### **Interview and Communication Lesson**

In informal conversation with high school youth, the unpreparedness for interviews was mentioned. Within the program there was also a desire to help youth showcase their recently learned cooking skills acquired during the cooking lesson by preparing a meal they would then eat in a formal setting. With those two factors in mind it was determined a lesson was needed to combine cooking and interview scenarios. In order to continue the fostering of belonging within the group a meal is shared together with conversation and learning. Through five hours together, youth will showcase their new cooking skills by preparing a meal they plan out together (Appendix C). Youth will show their creativity by setting and decorating their tables in a formal style. Before eating a meal with their group, youth will learn how to properly eat their food in a formal setting. After the meal is finished and cleaned up youth will experience a mock interview with an adult volunteer.

### **Lesson Structure**

This series of lessons are designed to be done in five separate sessions; three STEM, one Cooking, and one Interview and Communication. They are also designed to be able to be broken down into smaller segments to fit into an hour or two after school instead of all day on a weekend. This will be done in order to ensure the lessons are versatile for Polk County 4-H staff members and the community partners allowing the use of their space to serve the youth of Des Moines.

This program was designed in order to give youth who are not currently a part of the Polk County 4-H Program a taste of what 4-H can offer to youth. While there are not lessons directly related to each of the Iowa 4-H Program Priority Areas; STEM, Leadership and Civic Engagement, Communication and the Arts, and Healthy Living, there are aspects of each area within each of the lessons. The STEM lesson incorporates aspects of communication, leadership, arts, and civic engagement.

### **Barriers Experienced by Youth**

As aforementioned, transportation to and from 4-H programs can greatly impact a youth's ability to participate in a program. The interim program leader of Iowa 4-H cited physical and geographical location as one of the biggest roadblocks to youth participation in the urban setting (Interim 4-H State Program Leader, personal communication, June 14, 2019). This program will be offered in the Des Moines Metro area with a community partner of Iowa State University Extension and Outreach in Polk County. There are many YMCA, educational centers, and youth recreation centers who allow Polk County Staff to utilize their space at no cost as long as the program is offered for free and their youth can attend as well. The Des Moines Public School (DMPS) district has a contract with the Des Moines bus system which offers a bus pass to all DMPS students for free. Offering this program at a location within the metro and on the

bus line will allow the urban youth of Des Moines to participate fully without the restriction of transportation issues.

An additional barrier considered was cost associated with a program or event. A Region 13 Youth Program Specialist mentioned that besides the cost to register for 4-H each year, there are costs involved with trips, projects, workshops, and materials youth may encounter (Region 13 Youth Field Program Specialist, personal communication, June 18, 2019). One requirement of the location utilized for this program is the program is offered for free to the participants. There is no cost associated with the STEM lesson (Appendix A) aside from staff time as the Virtual Reality equipment, computer, and camera have been provided to staff. The Cooking lesson plan (Appendix B) does have a cost of ingredients associated with the program, however the cost can be absorbed by Polk County Extensions' yearly program budget. The Interview and Communication lesson plan (Appendix C) also has an ingredient cost associated, but once again the cost can be absorbed by the program budget. With the cost of ingredients, staff time, and materials covered by Polk County Extension and the cost of the location covered by the community partner this program can be offered for free to all youth who attend.

### **Components of Positive Youth Development**

The Interim Iowa 4-H Program leader mentioned ownership as a reason youth stay involved with a program. If youth have a voice and choice with how the program is run, they have a greater investment and therefore tend to stay involved throughout their years (Interim 4-H Program Leader, personal communication, June 14, 2019). The STEM lesson (Appendix A) gives youth a chance to learn how to operate the equipment and then allows them to decide from there what they would like to film and create to show their families. Anderson-Butcher (2005) suggests those who work with youth provide informative, contingent, and specific feedback as

youth learn new skills so they are able to correct errors and experience mastery and success.

Through the Cooking lesson (Appendix B) youth learn the basics of cooking, and then they are able to plan and prepare their own meal using their newly attained skills and knowledge. Upon completion of the Interview and Communication lesson (Appendix C) youth will leave with increased knowledge on interview techniques which will be evident as they work to find part time jobs, apply for scholarships, and acquire leadership positions within their schools.

The professional development specialist with Iowa 4-H believes youth leave 4-H because they do not feel like there is a good fit for them within their current local club (Professional Development Specialist, personal communication, June 15, 2019). Throughout this series of lessons, youth will work through team building ice breakers together to increase their comfort level with each other and the instructor. Working through the ice breakers at the beginning of each lesson and spending time together during the lessons will ideally help to increase the level of belonging the youth feel within the group. The more programs satisfy this need [belonging] the more likely youth are to maintain and continue their involvement, (Anderson-Butcher, 2005) specifically within the Polk County 4-H program.

### **Conclusion**

Positive Youth Development involves five c's; Connection, Confidence, Character, Competence, and Caring. Over the course of this 4-H program, youth will form connection to those within the group as well as the facilitator by working through ice breakers and spending time with the group members from session to session. This connection formed by the youth will carry on after completion of the program should the youth decide to continue participating in the Polk County 4-H program. Confidence and competence will also be developed by youth as they learn the basics of different tasks and then make their own decisions on how to showcase those

developed skills with confidence. Once youth complete the program they will be able to utilize the new skills they have gained to cook for others and interview for jobs, scholarships, or leadership positions.

Within Positive Youth Development the 40 Developmental Assets are often referred to as vital supports of a successful youth program. The external assets of Other Adult Relationships and Youth Programs are supported by providing a trained facilitator and adult volunteers to help mentor the youth through the programs and by attending this program, youth will have an additional outlet to spend time in youth programs outside of the school day. Two internal assets supported by this program include Planning and Decision Making as well as Self-Esteem. Youth will be in charge of planning out their videos and deciding what they want to prepare for their meal. Throughout the entirety of this program, youth will be empowered by adults and their peers to succeed, which will greatly impact the youth's self-esteem and confidence.

This program was designed to be utilized by Iowa State University Extension and Outreach- Polk County 4-H staff in the Des Moines metro area. Steps were taken to ensure barriers such as transportation and cost did not influence a youth's ability to participate in the program. Besides these barriers, consideration was given towards practices which promote youth developing a sense of belonging and a feeling of mastery after completion. The final intention of this program is to help Polk County 4-H provide programs geared towards youth in seventh through twelfth grade, an age group which typically lacks relevant programs and give non 4-H members an idea of what opportunities becoming involved in 4-H can create.



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## Appendix A



**IOWA STATE UNIVERSITY**  
Extension and Outreach

**Program Priority: STEM**

**Curriculum: Virtual Reality and 360 Camera**

### **Learning Objectives:**

1. Youth will learn the components and how to set up a virtual reality system
2. Youth will explore how the virtual world works in connection with their videos
3. Youth will learn how to shoot a 360 degree video
4. Youth will learn how to set up equipment to showcase their videos to friends and family

### **Total Estimated Time:**

- Introductory session 3 hours
- Recording session 1-1.5 hours
- Final session 2 hours
- Total 6-6.5 hours

### **Materials:**

- 3 tossable items
- VR Kit
- VR Computer bag
- Blue painters tape
- 360 camera
- Tripod
- Brain break kit
- Gyro rings
- Survey
- Pencils

### **Prior to meeting:**

- Ensure the computer and all other systems are up to date on updates, if not ensure they are updated before use
- Print off surveys
- Gather supplies
- Look at local calendar to see what upcoming events are happening to have suggestions for the youth

**Procedure(s):**

Time	Activity
<b>0-5</b>  <b>Introduction</b>	<p><i>Introduction- 5 minutes</i></p> <ul style="list-style-type: none"> <li>● Explain who you are, your job, and a fun fact about yourself</li> <li>● Explain what Iowa State University Extension and Outreach is and what it does</li> <li>● Explain what 4-H is and what it does</li> <li>● Inform youth of the layout of the room, where the bathrooms are, and the ground rules</li> <li>● Today we are going to work together to understand how to set up and use a virtual reality system and 360 camera.</li> </ul>
<b>5-20-</b> <b>Group ice</b> <b>breaker</b>	<p><i>Do- 10 minutes</i></p> <ul style="list-style-type: none"> <li>● Have the group form a circle in an open area of the room</li> <li>● Introduce the ‘Group Juggle’ activity <ul style="list-style-type: none"> <li>○ We are going to be playing a game called ‘Group Juggle’ to get to know each other’s names.</li> <li>○ I will start with this tossable item (rubber chicken, rubber frog, plastic item), I will then pick someone to throw this to in the circle, once they catch the item they will throw it to someone else. We will continue this until everyone in this circle has had the tossable item once, whoever is last will throw it back to me to complete the circuit. You cannot give the item to the person on either side of you, and we are tossing the item underhand.</li> <li>○ It will be important to remember who you are throwing the item to, and who threw it to you</li> </ul> </li> <li>● Check for understanding by asking the following questions <ul style="list-style-type: none"> <li>○ What do you do with the item once you catch it? Throw it to someone who hasn’t had it yet</li> <li>○ How are you throwing the item? Underhand</li> <li>○ Who can’t you throw your item to? Someone who has already had it and the person on either side of you</li> </ul> </li> <li>● Start the game</li> <li>● After the tossable item makes it back to you, challenge the group to do the pattern again. Ask for ideas to help make sure the items are tossed successfully.</li> <li>● Once the item makes it back to you a second time introduce a second item <ul style="list-style-type: none"> <li>○ You have done a great job, so now I want to challenge you. This is a second item for this group to toss, however instead of forward it is going to be thrown backwards.</li> </ul> </li> <li>● Start the game again with both items</li> <li>● After both items make it back challenge the group to do the pattern again. Ask for different ideas to make sure the items are tossed successfully.</li> <li>● Once the items both make it back to you a second time introduce the third item <ul style="list-style-type: none"> <li>○ I have a bigger challenge for you now that this group has completed that challenge. This third item will be passed from side to side starting on my left.</li> </ul> </li> <li>● Start the game</li> </ul>

	<ul style="list-style-type: none"> <li>• After the items make it back to you ask the group if they would like to try and complete the pattern in a certain amount of time or with the fewest amounts of drops.</li> <li>• Continue the game with the decision the group has made.</li> </ul> <p><b>Reflect- 4 minutes</b></p> <ul style="list-style-type: none"> <li>• Ask and discuss the following questions             <ul style="list-style-type: none"> <li>○ What made it easier to get the objects around the circle?</li> <li>○ What was difficult?</li> <li>○ What changes did we make?</li> <li>○ What would you do differently if we were to do this activity again?</li> </ul> </li> </ul> <p><b>Transition- 1 minute</b></p> <ul style="list-style-type: none"> <li>• Explain what we will be doing next             <ul style="list-style-type: none"> <li>○ Next we will be looking at the different parts of our virtual reality equipment and what they do. For this we will be taking some time with each item and discussing what part they play in the entire system.</li> </ul> </li> </ul>
<p><b>20-50</b></p> <p><b>Learning about the virtual reality equipment</b></p>	<p><b>Do- 10 minutes</b></p> <ul style="list-style-type: none"> <li>• Start by showing all youth the carrying case and backpack for the equipment</li> <li>• Remove each item from the carrying case and backpack and place them on the table so everyone can see. One at a time explain what each item is and what it does.</li> <li>• Computer             <ul style="list-style-type: none"> <li>○ The computer is what all of the items are plugged into. This computer has 3 USB ports, an HDMI port, and the power port. Show where each of these ports are.</li> </ul> </li> <li>• USB 2.0             <ul style="list-style-type: none"> <li>○ The USB 2.0 is an expander for the additional USB ports we will need to plug in to power all of the equipment.</li> </ul> </li> <li>• Right and left sensors             <ul style="list-style-type: none"> <li>○ These are used to sense the movements and locations of the hand held devices. It is important these are placed at least three feet apart when we are setting up the system.</li> </ul> </li> <li>• Headset             <ul style="list-style-type: none"> <li>○ This is used for us to see the virtual reality world. This is the only piece of equipment with a HDMI and USB cord, so both will need to be plugged in. It is made of a few different parts; the lenses, the over the head strap, and the adjuster. These all work together to ensure everyone using the equipment can do so safely and correctly.</li> </ul> </li> <li>• Right and left hand held             <ul style="list-style-type: none"> <li>○ These are used in each hand to communicate the movements and other controls to the overall system.</li> </ul> </li> </ul> <p><b>Reflect- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Ask the following questions             <ul style="list-style-type: none"> <li>○ Which piece of equipment has an HDMI and USB hook up? The headset</li> <li>○ How far apart should the sensors be? 3 feet</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Why do we have the USB 2.0? To be able to plug everything in</li> </ul> <p><b>Apply- 10 minutes</b></p> <ul style="list-style-type: none"> <li>● Allow the youth 10 minutes to come up to the table and explore the different pieces of equipment. They can touch the hand controls, see how to adjust the headset, feel how much each of the items weigh</li> </ul> <p><b>Transition-5 minutes</b></p> <ul style="list-style-type: none"> <li>● Next we will be learning how to set up the VR system. Now would be a good time to go use the restroom or grab a drink.</li> </ul>
<p><b>50-90</b></p> <p><b>Set up the VR system and experience VR.</b></p>	<p><b>Do-10 minutes</b></p> <ul style="list-style-type: none"> <li>● Explain to the youth that we will now be setting up the VR system and going through our first VR experience.</li> <li>● Start explaining the steps as you do them as the youth watch <ul style="list-style-type: none"> <li>○ First we will turn on and plug in the computer, once the computer is on we will place it on the table facing the VR area.</li> <li>○ Next we will plug in the USB 2.0 in order to have enough USB ports</li> <li>○ After that we will plug in the sensors and place them at least 3 feet apart on the table</li> <li>○ Once the sensors are set up we will plug in the headset and set it on the table</li> <li>○ Finally we will turn on the hand held controllers</li> </ul> </li> <li>● Once everything is turned on show the youth the program- Oculus- which will be used for the VR program. <ul style="list-style-type: none"> <li>○ When opening this program it will prompt us with the next steps. We will be setting up the VR space, the sensor distance, and the location of the headset.</li> <li>○ For this I would like to have three volunteers come up and try out the system.</li> </ul> </li> <li>● Allow the three volunteers to follow the prompts on the computer to finish the set up process.</li> <li>● Once the VR is set up use blue painters tape to tape out the perimeter the youth set up in the system for safety.</li> <li>● Place a chair in the center of the square for the simulation.</li> </ul> <p><b>Reflect- 5 minutes</b></p> <ul style="list-style-type: none"> <li>● Ask the following questions <ul style="list-style-type: none"> <li>○ What do you think is the most challenging step?</li> <li>○ What do you think is the most important step?</li> <li>○ What kind of space do you need to set this up? A table and an open space</li> </ul> </li> </ul> <p><b>Apply- 20 minutes</b></p> <ul style="list-style-type: none"> <li>● Have youth one at a time come up and experience the roller coaster VR. While they are taking turns have youth brainstorm different ways and places they could use the VR set up.</li> </ul> <p><b>Transition- 5 minutes</b></p>

	<ul style="list-style-type: none"> <li>Next we will be learning about the 360 camera and then experimenting with our own recordings.</li> </ul>
<b>90-140</b>  <b>360</b> <b>Camera</b>	<p><b><i>Do- 10 minutes</i></b></p> <ul style="list-style-type: none"> <li>Show the youth the 360 camera, its box, and the tripod.</li> <li>Take the camera out of the box and show the two sides to everyone.             <ul style="list-style-type: none"> <li>This is the 360 camera, what do you notice about it? What looks different than the camera you usually see?</li> </ul> </li> <li>After the youth make observations explain how the camera works             <ul style="list-style-type: none"> <li>This camera records everything around it. When you attach it to the tripod and hold it up in the air it will capture you holding it, as well as what is above and around it. It will also record the audio said around the camera as it records.</li> </ul> </li> </ul> <p><b><i>Reflect- 10 minutes</i></b></p> <ul style="list-style-type: none"> <li>Ask the following questions             <ul style="list-style-type: none"> <li>What is the most interesting thing about this camera?</li> <li>Where do you see yourself using this camera?</li> <li>How can you use this to explain a process to someone else?</li> </ul> </li> </ul> <p><b><i>Apply- 25 minutes</i></b></p> <ul style="list-style-type: none"> <li>Now we are going to break into group and brainstorm a short video to record and show others. This video will need to be between one and three minutes long.</li> <li>Allow the youth time to brainstorm ideas to record. Be available to help groups who have trouble with any part of the process.</li> </ul> <p><b><i>Transition- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>Next we will be uploading our videos to the computer and putting ourselves into the video to see how it works.</li> </ul>
<b>140-165</b>	<p><b><i>Do- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>Explain to the youth how to remove the SD card from the camera and put it into the computer.</li> <li>Once the card is in the computer show them the software used to open the video and transfer it to the VR software.</li> <li>Once all videos have been transferred show the youth how to play the video in VR.</li> </ul> <p><b><i>Reflect- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>What step do you think is the most important?</li> <li>Which step is the most difficult?</li> <li>What can you do to ensure this process happens correctly?</li> </ul> <p><b><i>Apply- 10 minutes</i></b></p> <ul style="list-style-type: none"> <li>Allow youth time to watch their video in VR</li> </ul> <p><b><i>Transition- 5</i></b></p> <ul style="list-style-type: none"> <li>Next we will be brainstorming and scheduling the videos we want to record outside of</li> </ul>

	today for the next session.
<b>165-175</b> <b>Video planning</b>	<p><i>Do- 10 minutes</i></p> <ul style="list-style-type: none"> <li>Allow youth time to brainstorm and schedule what they want to do for their videos. They will need to decide on a topic or location and schedule with the instructor to be able to use the equipment.</li> </ul>
<b>175-180</b> <b>Wrap up</b>	<p><i>Do- 5 minutes</i></p> <ul style="list-style-type: none"> <li>Wrap up</li> <li>Answer any questions youth have</li> <li>Make sure you have the dates written down for the videos before the next session</li> <li>Thank everyone for coming and make sure to hand out the invite to the parents to come to the end of the next session to watch the videos.</li> </ul>
<b>0-90</b>	<p><i>Do- 0-90 minutes</i></p> <ul style="list-style-type: none"> <li>Meet with the youth at their determined time and location to film. Help the youth trouble shoot any issues that may arise, but otherwise encourage the youth to make all of the decisions for the video!</li> <li>Once recording is finished pack up the material and remind the youth of the final session where we will upload and edit our recordings.</li> </ul>
<b>0-5</b> <b>Introduction</b>	<p><i>Introduction- 5 minutes</i></p> <ul style="list-style-type: none"> <li>Remind the youth who you are, your job, and a fun fact about yourself</li> <li>Remind the youth what Iowa State University Extension and Outreach is and what it does</li> <li>Remind the youth what 4-H is and what it does</li> <li>Remind the youth of the layout of the room, where the bathrooms are, and the ground rules</li> <li>Today we will be working to upload the footage we captured when we met last. Then we will be editing it to show our friends and family who come here in 2 hours</li> </ul>
<b>5-20</b> <b>Group ice breaker</b>	<p><i>Do- 10 minutes</i></p> <ul style="list-style-type: none"> <li>Form a circle, the goal is to have the ring pass from person to person around the circle one full time without any of the small rings stopping</li> <li>Start the rings spinning/buzzing and try passing around the entire group. Avoid giving them clues or helping them too much. Let them try to get the ring started again after it stops, if they truly cannot get it to start again you can help.</li> </ul>



	<p><b>Reflect- 4 minutes</b></p> <ul style="list-style-type: none"> <li>Ask the following questions             <ul style="list-style-type: none"> <li>How did you feel when the gyro ring came to you? Were you nervous?</li> <li>How would you describe the pressure you felt not to mess up in front of the group or let them down by making a mistake?</li> <li>What do you normally do when you make a mistake?</li> <li>There is a concept called 'failing forward' which means learning from your mistakes and moving forward. How easy is that for you to do?</li> <li>As you are learning a new skill how good will you be at it right away?</li> <li>How did you get better at the gyro ring?</li> <li>How do you think you can become a better leader?</li> </ul> </li> </ul> <p>Transition- 1 minute</p> <ul style="list-style-type: none"> <li>Next we will be uploading our videos and working through editing them together</li> </ul>
<p><b>20-70</b></p> <p><b>Video Editing</b></p>	<p><b>Do- 15 minutes</b></p> <ul style="list-style-type: none"> <li>Show the youth the program they will be using as a refresher from the first session.</li> <li>Once each group has opened the software instruct them to upload their footage to the computer and open it in the program.</li> <li>Help the youth get familiar with the different aspects of the editing program.</li> </ul> <p><b>Reflect-5 minutes</b></p> <ul style="list-style-type: none"> <li>How do you merge two clips together? Drag them together on the bottom ribbon</li> <li>How do you add music to the background? Upload a music file and insert it into the audio track under the frames you want it to play on</li> <li>What is going to be the most difficult aspect of this process?</li> <li>How can you work around these issues?</li> </ul> <p><b>Apply- 30 minutes</b></p> <ul style="list-style-type: none"> <li>Give youth time to work on editing their video. Be available if there are questions or issues which arise.</li> </ul>
<p><b>70-80</b></p> <p><b>Brain Break</b></p>	<p><b>Do- 10 minutes</b></p> <ul style="list-style-type: none"> <li>Brain break- Encourage the youth to get up and move around.</li> <li>Use the brain break dice to roll an activity for the youth to do</li> </ul>
<p><b>80-100</b></p> <p><b>VR Set Up</b></p>	<p><b>Do-5 minutes</b></p> <ul style="list-style-type: none"> <li>Remind the youth how to set up the VR equipment and how to open their video in the VR program</li> </ul> <p>Apply- 15 minutes</p> <ul style="list-style-type: none"> <li>Have youth set up the VR system and open their videos in the program.</li> <li>Encourage them to test out their video to ensure it works before they show their friends and families.</li> </ul>

<b>100-120+ Wrap Up</b>	<p><b><i>Do- 5 minutes</i></b></p> <ul style="list-style-type: none"><li>• Have youth prepare the area for others to come see their videos. This includes cleaning up anything that isn't a part of the VR system.</li><li>• Set out a camera and tripod for the visitors to see</li></ul> <p><b><i>Reflect- 10 minutes</i></b></p> <ul style="list-style-type: none"><li>• Pass out the survey and have youth complete the questions</li></ul> <p><b><i>Apply- 5+ minutes</i></b></p> <ul style="list-style-type: none"><li>• Open the room to the visitors and have the youth introduce the VR world to those they invited</li></ul>
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## Appendix B



**IOWA STATE UNIVERSITY**  
Extension and Outreach

**Program Priority: Healthy Living**

**Curriculum: 4-H Cooking 101 and 202**

### **Learning Objectives:**

1. Youth will learn about My Plate and how to balance their meals
2. Youth will learn different food safety techniques and how to cut fruits and vegetables
3. Youth will explore different cooking items
4. Youth will prepare and eat a meal from scratch

**Total Estimated Time: 5 hours**

### **Materials:**

- My Plate Relay
- iPads for Kahoot
- 3 fruits
- 3 vegetables
- Knives
- Cooking item lists
- Food safety handout
- Ingredients and materials for each recipe used

### **Prior to meeting:**

- Shop for ingredients
- Prepare Kahoot
- Print materials
- Recruit volunteers to help with the cooking and cutting

**Procedure(s):**

Time	Activity
<b>0-5</b>  <b>Introduction</b>	<p><b><i>Introduction- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>● Explain who you are, your job, and a fun fact about yourself</li> <li>● Explain what Iowa State University Extension and Outreach is and what it does</li> <li>● Explain what 4-H is and what it does</li> <li>● Inform youth of the layout of the room, where the bathrooms are, and the ground rules</li> <li>● Today we are going to learn about My Plate, different kitchen equipment, cutting techniques, food preparation techniques, and how to make a meal from scratch.</li> </ul>
<b>5-30-</b> <b>Group ice</b> <b>breaker</b>	<p><b><i>Do- 15 minutes</i></b></p> <ul style="list-style-type: none"> <li>● Have each youth find a partner</li> <li>● Read the following:             <ul style="list-style-type: none"> <li>○ You and your partner will need to find something you have in common with one another that is not obvious or already known by everybody. For example, you can't say 'we both wear glasses' or 'we go to the same school.' Each team will share their answers. I have the right to not accept your answer if I feel it is too obvious or commonly known, you will have 15 seconds to do this.</li> </ul> </li> <li>● Before they begin, check for understanding             <ul style="list-style-type: none"> <li>○ What are you doing? Finding something we have in common</li> <li>○ What is the requirement for the thing you have in common? It can't be obvious</li> </ul> </li> <li>● Start the game</li> <li>● After 15 seconds let them know their time is up. Ask each group to share what they had in common. Be sure everyone can hear the answers.</li> <li>● Give pairs 10 seconds to join another pair, doubling the size of your group.</li> <li>● Read the following:             <ul style="list-style-type: none"> <li>○ In a moment, but not right now, I'm going to say go and give each group 30 seconds to find something not obvious your group has in common and is not one of the responses we've already had.</li> </ul> </li> <li>● Before you begin, check for understanding             <ul style="list-style-type: none"> <li>○ What is different between this round and the last? There are more group members, it can't be something that was already said.</li> </ul> </li> <li>● Call when time is up and have all groups share</li> <li>● Continue as many times as needed until the entire group is together. Add more time as each group gets larger.</li> </ul> <p><b><i>Reflect- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>● Ask the following questions             <ul style="list-style-type: none"> <li>○ What preparations were made in order to have this activity go smoothly?</li> <li>○ Discuss with your partner what you noticed about how I gave directions during this game. What did I do that was helpful or not helpful to you?</li> <li>○ What can happen when directions are not clear?</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ How will you know as a group leader when you have given confusing directions?</li> <li>○ What role does tone of voice, volume, body language, and attitude have in getting a group to follow your directions?</li> <li>○ How does giving direction relate to what we are going to do today?</li> </ul> <p><b>Transition- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Next we are going to be learning about My Plate and what the different parts of a meal are.</li> </ul>
<b>30-60</b>  <b>My Plate</b>	<p><b>Do- 10 minutes</b></p> <ul style="list-style-type: none"> <li>• Start by showing the youth the My Plate poster with the different color sections and ask what they think the categories are.</li> <li>• As they say the correct category remove the cover over the words. <ul style="list-style-type: none"> <li>○ Fruits</li> <li>○ Vegetables</li> <li>○ Grains</li> <li>○ Protein</li> <li>○ Dairy</li> </ul> </li> <li>• Once they name all of the categories inform the youth we will be brainstorming some different foods that fit into those categories.</li> <li>• Hold up different food cards and ask them where they think the foods fall. Make sure to have some of the tricky or different foods for a challenge.</li> <li>• Explain to the youth the different sections on the plate correspond to how much of each food they should have in each meal. ¼ of your meal should be each of fruit, vegetable, grain, and protein.</li> </ul> <p><b>Reflect- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Ask the following questions <ul style="list-style-type: none"> <li>○ Which category had the most interesting foods?</li> <li>○ Which food surprised you the most?</li> <li>○ Did the last meal you ate include something from every category?</li> </ul> </li> </ul> <p><b>Apply- 10 minutes</b></p> <ul style="list-style-type: none"> <li>• Inform the youth we will be doing a My Plate relay race. Scatter the food cards at one end of the room and divide the youth into groups. <ul style="list-style-type: none"> <li>○ One at a time each a member of your group is going to run to the other side of the room and pick up a card. You will then bring it back and place it on your plate. Once this is done the next person will go get a card. You have to bring back the first card you pick up and the first group to make a complete meal wins</li> </ul> </li> <li>• Start the game</li> <li>• Play a few rounds, checking the meals each time.</li> </ul> <p><b>Transition-5 minutes</b></p> <ul style="list-style-type: none"> <li>• Next we will be learning about different items found in a kitchen and what they are used for.</li> </ul>

<b>60-90</b>	<p><b><i>Do-10 minutes</i></b></p> <ul style="list-style-type: none"> <li>• Instruct youth to get out their smart phones or give them an iPad if they do not have a smart phone.</li> <li>• Explain to the youth we will be learning about different items in the kitchen by playing Kahoot, an online trivia game system. <ul style="list-style-type: none"> <li>○ We are going to have some fun while we learn about different items that we can find in the kitchen. To do this you will see the picture of an item up on the screen and you will have choices on your phones as to what the item is. You will pick what you think the item is when prompted and will be rewarded points for each correct answer. Before we start though, we will quickly go through each of the items so you have an idea of what you will see.</li> </ul> </li> <li>• Hand out the kitchen tools page and go through the list.</li> <li>• Once you finish going through the list instruct the youth to flip their paper over so they cannot see it while playing the game.</li> </ul> <p><b><i>Reflect- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>• Ask the following questions <ul style="list-style-type: none"> <li>○ How do you select your answer? On the phone or iPad</li> <li>○ What do you think is the coolest item?</li> <li>○ What is one item you didn't know about before today?</li> </ul> </li> </ul> <p><b><i>Apply- 10 minutes</i></b></p> <ul style="list-style-type: none"> <li>• Go through the Kahoot on kitchen items, once they complete the game determine the winner and give them a 4-H item as their prize!</li> </ul> <p><b><i>Transition- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>• Next we will talk about food safety and how to cut different fruits and vegetables to prepare a snack.</li> </ul>
<b>90-120</b>  <b>Food Safety and Cutting a snack</b>	<p><b><i>Do- 10 minutes</i></b></p> <ul style="list-style-type: none"> <li>• Start by explaining the different food safety basics. <ul style="list-style-type: none"> <li>○ Before you begin to handle food: <ul style="list-style-type: none"> <li>▪ Wash your hands with soap and warm water for at least 20 seconds</li> <li>▪ Be sure your fingernails are clean</li> <li>▪ Check to see that your work area is clean</li> <li>▪ Wear clean clothes</li> <li>▪ Wear an apron</li> <li>▪ Use clean cooking utensils</li> <li>▪ Clip long hair back so it will not fall into the food</li> <li>▪ Use a clean cloth or paper towel to wipe your hands.</li> <li>▪ Use a paper towel or mop to wipe up spills on the floor</li> </ul> </li> <li>○ While you are cooking <ul style="list-style-type: none"> <li>▪ Keep your hands away from your hair, face, and pets,</li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>▪ Don't lick your fingers</li> <li>▪ Cover your nose and mouth if you have to sneeze or cough, wash your hands before you start to cook again.</li> <li>▪ Do not use your mixing or cutting utensils for tasting.</li> <li>▪ Keep cold foods cold until ready to use.</li> <li>○ Clean the food <ul style="list-style-type: none"> <li>▪ Wash fresh fruits and vegetables in plenty of cool water before using them.</li> <li>▪ Use a vegetable brush to wash foods such as carrots, celery, and potatoes to remove any soil that remains.</li> <li>▪ Wipe the top of all cans, boxes, and bottles before opening them.</li> <li>▪ Look for clues that the food might be spoiled.</li> </ul> </li> </ul> <p><b>Reflect- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Ask the following questions <ul style="list-style-type: none"> <li>○ Why would you wipe the tops of cans, boxes, and bottles before opening them? Keep germs that could be on them out of the food that comes out</li> <li>○ Why don't you want to use your utensils for tasting? You could contaminate the food</li> <li>○ What are some signs of spoiled food? Different color, weird smell, feels different</li> </ul> </li> </ul> <p><b>Apply- 30 minutes</b></p> <ul style="list-style-type: none"> <li>• Instruct the youth that we will not break into groups and rotate around the room to the different vegetable and fruit stations and cut them. <ul style="list-style-type: none"> <li>○ Have six stations set up around the room with a volunteer at each station to help the youth learn the proper way to cut each. This will vary based on what is in season at the time of the lesson.</li> </ul> </li> <li>• Once they have rotated through each station have the youth get a plate and some fruits and vegetables to eat as a snack</li> </ul> <p><b>Snack- 10 minutes</b></p> <p><b>Transition- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Next we will be working on preparing a meal from scratch to eat together!</li> </ul>
<p><b>120- 220</b></p> <p><b>Cooking</b></p>	<p><b>Do- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Explain to the youth that we will be breaking up into two different groups to create a meal to eat together.</li> <li>• Break the youth up into two groups to prepare the following <ul style="list-style-type: none"> <li>○ Group 1: <ul style="list-style-type: none"> <li>▪ Make your own meat sauce from 4-H Cooking 101 page 52</li> <li>▪ Make your own salad bar from 4-H cooking 101 page 43</li> <li>▪ Garlic Biscuits from 4-H Cooking 101 page 58</li> <li>▪ Easy to fix cream pie with crumb crust from 4-H Cooking 101 page 65</li> </ul> </li> <li>○ Group 2 <ul style="list-style-type: none"> <li>▪ Spend Smart Eat Smart chicken alfredo</li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>▪ Cheese Muffins from 4-H Cooking 101 page 49</li> <li>▪ Roasted Vegetables from 4-H Cooking 101 page 35</li> <li>▪ Easy to fix cream pie with crumb crust 4-H Cooking 101 page 65</li> </ul> <p><b>Reflect- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Ask the following questions <ul style="list-style-type: none"> <li>○ What is an important step to remember with food safety during this time? WASH HANDS!</li> <li>○ What do you think will be most challenging with making these foods?</li> <li>○ Which dish are you most looking forward to?</li> </ul> </li> </ul> <p><b>Apply- 90 minutes</b></p> <ul style="list-style-type: none"> <li>• Allow the youth to cook with the volunteers in the room to help ensure they are safe.</li> <li>• Once food is done have the youth create a buffet style area to get their lunch and allow them time to eat.</li> <li>• Encourage youth to clean what they can as they go, but inform them there will be time after lunch to finish cleaning everything.</li> </ul>
<b>220-250</b> <b>Lunch</b>	<p><b>Lunch- 30 minutes</b></p> <ul style="list-style-type: none"> <li>• Allow youth 30 minutes to eat and talk among themselves</li> </ul>
<b>250-270</b> <b>Clean Up</b>	<p><b>Do- 20 minutes</b></p> <ul style="list-style-type: none"> <li>• Give the youth time to finish cleaning up their area and return all items to their spots</li> </ul>
<b>270-290</b> <b>Meal Planning</b>	<p><b>Do- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Inform the youth they will not be planning a meal to make at the next lesson to serve while they learn etiquette.</li> <li>• Explain they will have 90 minutes to cook the meal.</li> <li>• Pass out the 4-H cookbooks to the groups to be able to read.</li> <li>• Inform the groups they will have time to look through the book and create a shopping and material list to hand in when they leave.</li> </ul> <p><b>Reflect- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Ask the following questions <ul style="list-style-type: none"> <li>○ What do we need to keep in mind while we select the recipes? Time, supplies, My Plate, etc.</li> <li>○ What lists are you making? Shopping and supply</li> <li>○ Where are you turning your lists in? To the instructor when leaving</li> </ul> </li> </ul> <p><b>Apply- 10 minutes</b></p> <ul style="list-style-type: none"> <li>• Allow youth time to create their menu.</li> <li>• Make sure you bounce around from group to group to answer questions and ensure they are keeping My Plate in mind.</li> </ul>



<b>290-300</b> <b>Wrap Up</b>	<i><b>Do- 10 minutes</b></i> <ul style="list-style-type: none"><li>• Wrap up</li><li>• Answer any questions youth have</li><li>• Make sure you have the lists</li><li>• Thank everyone for coming and make sure to remind everyone of the next date they are meeting</li></ul>
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## Appendix C



**IOWA STATE UNIVERSITY**  
Extension and Outreach

**Program Priority: Communication**  
**Curriculum: 4-H Cooking 101 and 202**

### **Learning Objectives:**

1. Youth will showcase the cooking skills they learned in the last session by preparing a meal
2. Youth will learn the proper way to set a formal table
3. Youth will experience how to eat a meal in a formal setting
4. Youth will experience a mock interview to prepare them for a job interview

**Total Estimated Time: 5 hours**

### **Materials:**

- All ingredients for meal
- Cooking items
- Table cloths
- Napkins
- Table wear
- Center piece material

### **Prior to meeting**

- Shop for materials
- Review the menu and determine proper eating techniques
- Arrange for volunteer interviewers

**Procedure(s):**

<b>Time</b>	<b>Activity</b>
<b>0-5</b> <b>Introduction</b>	<p><i>Introduction- 5 minutes</i></p> <ul style="list-style-type: none"> <li>• Explain who you are, your job, and a fun fact about yourself</li> <li>• Explain what Iowa State University Extension and Outreach is and what it does</li> <li>• Explain what 4-H is and what it does</li> <li>• Inform youth of the layout of the room, where the bathrooms are, and the ground rules</li> <li>• Today we will work to cook our meals we decided on last time we met, experience and etiquette dinner, and go over some other interview skills.</li> </ul>
<b>5-30-</b> <b>Group ice breaker</b>	<p><i>Do- 15 minutes</i></p> <ul style="list-style-type: none"> <li>• Have the group stand facing each other in two rows. Tell them to place both index fingers out in front of them and place the helium stick on top of the fingers. Before they begin, they may hold the stick with their thumbs, but after the game has begun, no thumbs are allowed! Index fingers should not be cupped to hold the stick together.</li> <li>• Tell them the object of this activity is to lower the stick to the ground without anyone's fingers losing contact with the stick.</li> <li>• Allow them to struggle with this for a while or possibly complete the challenge.</li> <li>• Try not to give them clues, but you can stop them and have them make a plan or discuss what is working or not working.</li> </ul> <p><i>Reflect- 5 minutes</i></p> <ul style="list-style-type: none"> <li>• Ask the following questions <ul style="list-style-type: none"> <li>○ What happened to the helium stick?</li> <li>○ Why was it so hard to keep your fingers in contact with the stick and lower it at the same time?</li> <li>○ How were you feeling during this activity?</li> <li>○ What did your group have to do to achieve success?</li> <li>○ How did others help you?</li> </ul> </li> </ul> <p><i>Transition- 5 minutes</i></p> <ul style="list-style-type: none"> <li>• Next we are going to break up into our groups and prepare our food for the meal</li> </ul>
<b>30-140</b> <b>Cooking</b>	<p><i>Do- 10 minutes</i></p> <ul style="list-style-type: none"> <li>• Start by reviewing the food safety techniques we covered last time <ul style="list-style-type: none"> <li>○ Before you begin to handle food: <ul style="list-style-type: none"> <li>▪ Wash your hands with soap and warm water for at least 20 seconds</li> <li>▪ Be sure your fingernails are clean</li> <li>▪ Check to see that your work area is clean</li> <li>▪ Wear clean clothes</li> <li>▪ Wear an apron</li> <li>▪ Use clean cooking utensils</li> <li>▪ Clip long hair back so it will not fall into the food</li> <li>▪ Use a clean cloth or paper towel to wipe your hands.</li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>▪ Use a paper towel or mop to wipe up spills on the floor</li> <li>○ While you are cooking <ul style="list-style-type: none"> <li>▪ Keep your hands away from your hair, face, and pets,</li> <li>▪ Don't lick your fingers</li> <li>▪ Cover your nose and mouth if you have to sneeze or cough, wash your hands before you start to cook again.</li> <li>▪ Do not use your mixing or cutting utensils for tasting.</li> <li>▪ Keep cold foods cold until ready to use.</li> </ul> </li> <li>○ Clean the food <ul style="list-style-type: none"> <li>▪ Wash fresh fruits and vegetables in plenty of cool water before using them.</li> <li>▪ Use a vegetable brush to wash foods such as carrots, celery, and potatoes to remove any soil that remains.</li> <li>▪ Wipe the top of all cans, boxes, and bottles before opening them.</li> <li>▪ Look for clues that the food might be spoiled.</li> </ul> </li> </ul> <p><b>Reflect- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Ask the following questions <ul style="list-style-type: none"> <li>○ What is one of the most important things to remember?</li> <li>○ Why do we want to make sure we keep food safety in mind while we cook?</li> </ul> </li> </ul> <p><b>Apply- 90 minutes</b></p> <ul style="list-style-type: none"> <li>• Allow youth to prepare their meals, be available to help with questions and troubleshoot if problems arise.</li> <li>• When youth are finished they are to also clean up their areas and set the food out for the meal.</li> <li>• Have youth place the warm food in the warming trays while they work on the next step</li> </ul> <p><b>Transition-5 minutes</b></p> <ul style="list-style-type: none"> <li>• Now we will move on to the etiquette lesson while we eat our meals.</li> </ul>
<p><b>140-170</b></p> <p><b>Table Setting</b></p>	<p><b>Do-10 minutes</b></p> <ul style="list-style-type: none"> <li>• Break youth into groups of 4</li> <li>• Hand each group a table setting diagram, table ware, tablecloth, napkins, and materials for a center piece</li> <li>• Go over the diagram with the youth</li> </ul> <p><b>Reflect- 5 minutes</b></p> <ul style="list-style-type: none"> <li>• Ask the following questions <ul style="list-style-type: none"> <li>○ What surprised you the most with where things go on a table?</li> <li>○ What do you think will be the hardest to remember?</li> <li>○ Why do we want to be able to set a formal table?</li> </ul> </li> </ul> <p><b>Apply- 10 minutes</b></p> <ul style="list-style-type: none"> <li>• Give the youth time to set their tables for four people, including decorating the table with a center piece.</li> </ul>

	<p><b><i>Transition- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>Next we will be sitting down and eating our meal while learning the proper way to eat these specific foods.</li> </ul>
<p><b>170-220</b></p> <p><b>Meal</b></p>	<p><b><i>Do- 10 minutes</i></b></p> <ul style="list-style-type: none"> <li>Help volunteers serve the food to the youth</li> <li>Once the food is on the table explain the proper way to eat each item</li> <li>Instruct the youth on how to use their napkins</li> <li>Show the youth what to do if they need to leave their seats during the meal</li> </ul> <p><b><i>Reflect- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>Ask the following questions <ul style="list-style-type: none"> <li>What do we do with the butter? Take a small amount and put it on our bread plate</li> <li>Which fork is for the salad? Small one on the right</li> <li>Where do you put your napkin if you have to leave the table? One the chair</li> </ul> </li> </ul> <p><b><i>Apply- 30 minutes</i></b></p> <ul style="list-style-type: none"> <li>Allow the youth to eat their meals</li> <li>Go around the room and answer questions and help with table conversation</li> </ul> <p><b><i>Transition- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>Next we will be working on mock interviews</li> </ul>
<p><b>220-250</b></p>	<p><b><i>Do- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>Explain the mock interview process the youth are about to go through <ul style="list-style-type: none"> <li>You will now participate in a mock interview with an adult volunteer. These volunteers will ask you some basic questions that you may be asked while in a job interview.</li> </ul> </li> <li>Instruct the youth on good interview etiquette- Handshake, eye contact, volume of voice, pause between question and answer.</li> </ul> <p><b><i>Reflect- 5 minutes</i></b></p> <ul style="list-style-type: none"> <li>Ask the following questions <ul style="list-style-type: none"> <li>What do you think is the most important part of an interview?</li> <li>What are some questions you think they may ask you?</li> <li>How do you introduce yourself?</li> </ul> </li> </ul> <p><b><i>Apply- 20 minutes</i></b></p> <ul style="list-style-type: none"> <li>Have the volunteers begin the mock interview process</li> <li>While youth are not being interviewed they are helping to clean up from the meal</li> </ul>
<p><b>250-270</b></p> <p><b>Evaluation</b></p>	<p><b><i>Do- 20 minutes</i></b></p> <ul style="list-style-type: none"> <li>Hand out the evaluations to the youth and allow them time to complete it</li> </ul>

<b>270-300 Wrap Up</b>	<b><i>Do- 30 minutes</i></b> <ul style="list-style-type: none"><li>• Provide the youth with more information about 4-H and Extension</li><li>• Collect information for group enrollment form</li><li>• Finish cleaning up the room</li><li>• Answer any last questions</li><li>• Give youth time to fill out 4-H registration if interested</li></ul>
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